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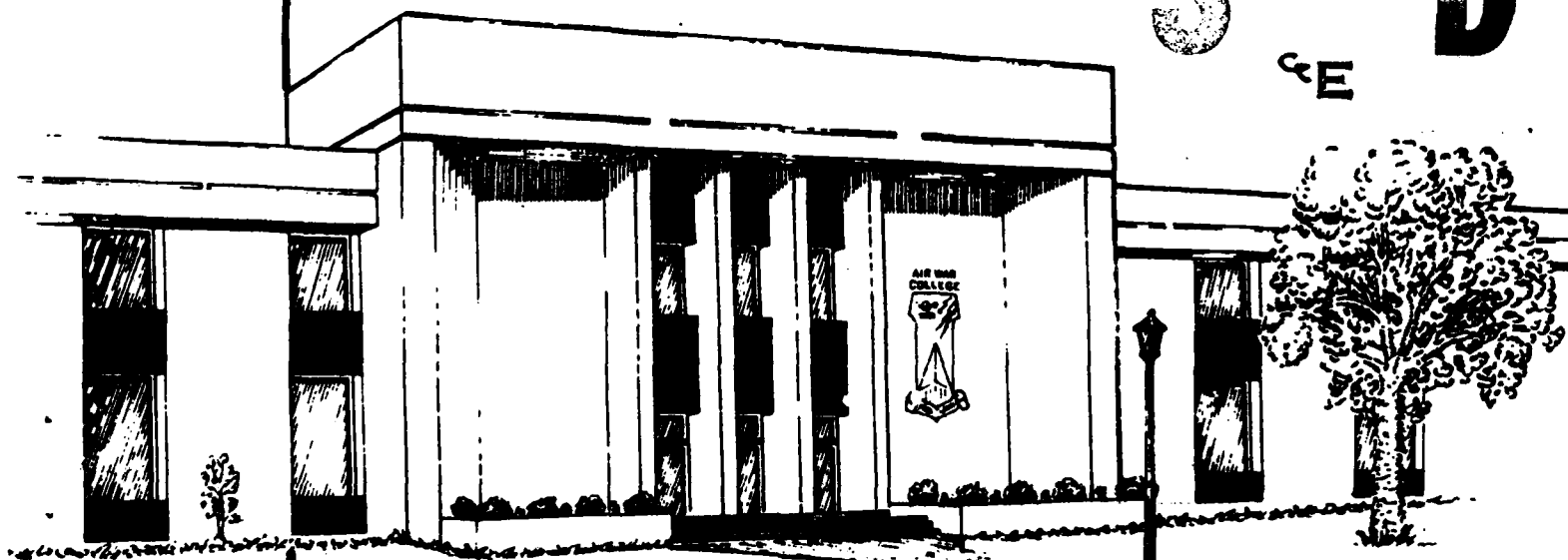
## RESEARCH REPORT

ZAIRE AIR FORCE: FUTURE MISSIONS

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ZAIRE AIR FORCE

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AIR UNIVERSITY  
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MAXWELL AIR FORCE BASE, ALABAMA

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AIR WAR COLLEGE

AIR UNIVERSITY

ZAIRE AIR FORCE: FUTURE MISSIONS

by

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A RESEARCH REPORT SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE RESEARCH

REQUIREMENT

Research Advisor: Dr. David Albright

MAXWELL AIR FORCE BASE, ALABAMA

MAY 1988

# AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

TITLE: Zaire Air Force: Future Missions

AUTHOR: Ediba Biangala, Lieutenant Colonel, Zaire Air Force

The threat of destabilization always faces the young nations, and guerrilla warfare is one of the techniques used by subversive powers to attain their goal via proxies. To be prepared to cope with guerrilla warfare is a must for many African nations. This is certainly true for Zaire. Efforts to upgrade its military capabilities are often undermined not only by scarcity of resources but by the challenging enterprise of building a nation from disparate people as well. Suggestions to end the problems encountered in close air support and rebels entrenched in the mountains near Kalemie are proposed.

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#### BIOGRAPHICAL SKETCH

Lieutenant Colonel Ediba Biangala was a squadron commander from 1983 until coming to the Air War College in 1987, and he has encountered many problems in performing close air support in training and in real conflict. Upon graduation from the Italian Air Academy in Naples, he flew with the counterinsurgency (COIN) aircraft Aermacchi MB-326 before his conversion to the Marcel-Dassault MIRAGE-5M in 1977. He graduated from Air Command and Staff College, class of 1982, before being assigned as squadron commander of the squadron flying MIRAGEs. Colonel Ediba is a graduate of Air War College, class of 1988.

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## CHAPTER I

### INTRODUCTION

Under colonial rule just a few decades ago, African nations are now slowly making their way to the status of partners in the international arena from mere sources of raw material essential to western countries' growing industries. To gain international respect, each state must put in place national institutions for the economy and the government that will work.

Armed forces are institutions that must perform well, to protect the country not only from external threats, but from internal threats as well, because of special political organizations that existed prior to colonization and have unfortunately survived in most cases. National armed forces which are built should reflect national unity, but in actuality just the opposite is true. They are the firm basis from which national feelings will spread into every main element of the emerging nation.

Internal political problems, inadequate economic infrastructure, and the reluctance of western powers to lose what they have gained during colonization make it very difficult for young African nations to develop at a satisfactory pace. In this context, Zaire is no exception. Despite

various difficulties, however, nation-building is in progress, and Zaire's armed forces have a key role in it.

The growth of the armed forces in general and the Air Force in particular for the next two decades will depend for the most part on the perceived external and internal threats. An analysis of threats, the best ways to counter these threats for the next twenty years, and the Air Force's contribution to the attainment of the armed forces' overall goal is basically the purpose of this paper.

## CHAPTER II

### THREAT ASSESSMENT

Zaire, in the center of Africa, covers a total area of 2,345,000 square kilometers. The countryside is diversified, with rain forests in the north, savanna in the south and southeast, and mountains in the east.

The present population is more than 36 million people, mainly in the urbanized areas. People come from no less than 250 tribes and speak as many different languages. Politically independent on 30 June 1960, the country has the big challenge of building a nation from people having different languages and culture, and deep tribal feelings.

Fortunately, the armed forces have always been the strongest glue for the emerging nation. They have defeated all secessionist tendencies from 1960 to as recently as 1985 during the second invasion of the city of Moba from Tanzania.

The size of the country, political trends in some of its neighbors and the resulting threat, the internal threat and the threat caused by separatist tendencies, the country's strategic location, and its possession of some strategic raw minerals all work in favor of a strong military establishment to defend the territorial integrity of the country and support the policy of the established government. There is no doubt that the Air Force, as well as the ground forces, has



a large role to play in light of the above factors. Its development to meet its mission for the next twenty years, however, depends on the overall expansion of the armed forces. This, in turn, is heavily dependent on economic wealth--which is in present days strictly a function of the world market of raw materials, a factor well beyond any political will.

After becoming politically independent, one of the challenges faced by African countries was to build nations from colonies which did not have time to prepare for self-government. That was especially the case for Zaire, which had been abandoned by the Belgians, who had ruled the country for eighty years.<sup>1</sup> At the dawn of independence, also, the spectre of secession was always present for the new African states, so building national identities was a prerequisite for these countries to survive as independent sovereign states.<sup>2</sup>

In the case of Zaire, many of the problems encountered by the young nation were to be attributed to its own sons. By their inexperience in the practice of European-type democracy, they brought the country into a state of crisis, from which erupted such disasters as an army mutiny, three major secessions--in Katanga (now Shaba), South Kasai (now Kasai Occidentale) and Stanleyville (now Haut-Zaire)--tribal warfare, famine in South Kasai, the takeover by the Commander in Chief of the armed forces, Colonel Joseph Mobutu,<sup>3</sup> and the intervention of a multinational United Nations military force that stayed in the country for four years.

Many others, however, stemmed from external intrusion in Zaire's domestic affairs by the masters of subversion, the Soviet Union and China, via neighboring states such as Burundi, Tanzania, and Congo-Brazzaville, and also via Ghana and the United Arab Republic. Congo-Brazzaville, Burundi, and Tanzania allowed their countries to be rebel sanctuaries from which attacks could be launched against Zairian territory, causing death and desolation to the population and the destruction of the already weak economic infrastructure.<sup>4</sup>

Few countries in Africa suffered from such repeated external intrusion in its affairs as Zaire did from its political independence until a few years ago. The obvious reason was that Zaire is so important strategically that any major power would like to have control of it.<sup>5</sup> Out of this reality comes the famous observation of President Mobutu: "Ce n'est pas facile d'etre le Zaire (It is not easy to be Zaire)."

The internal threat initially caused by inexperienced politicians, a threat which could have resulted in the division of the country, was brought to an end with the second takeover of the country by General Mobutu in November 1965. He has put in place a very efficient instrument for nation-building, the party-state of the Popular Movement for the Revolution (MPR). This party emphasizes that the country is one and indivisible, and it has made the population more aware than ever of the necessity to gather together for the

benefit of all. Vigilance is the keynote of the party because the political leaders know that even if the party has done well so far, the risks of rebirth of tribal feelings are not yet completely gone.

The main domestic threat today is still unrest fomented from outside--that is, internal subversion fostered by imperialist powers which want to control the country. They train and equip groups of people recruited from among those unhappy with the government, and they send these recruits back to the country not really to seize power, but to create a sense of insecurity among the people. In this manner, they hope to bring discredit on the authority of the government and eventually precipitate its fall through general uprising of the population.

As has been the case in the past, training provided to dissident elements is basically guerrilla warfare, which takes advantage of the nature of the landscape. Because there are good reasons to believe that external powers will always try to destabilize the country using that strategy, it is a national need to prepare the armed forces, at least the ground forces and the Air Force, to defeat quickly any organized armed rebellion inside the country. This should be a priority in the organization of the armed forces.

Ultimately, Zaire's armed forces must be trained and equipped to deal with two kinds of operations. They must be able to function inside their own territory, and they must

be ready to destroy rebel sanctuaries in neighboring states and counter the regular forces of those countries. This means that Zaire's armed forces must be superior in efficiency in order to dissuade hostile neighbors from allowing subversive armed movements to maintain bases in their territories.

### CHAPTER III

#### COPING WITH INTERNAL THREATS: COUNTERINSURGENCY

To counter rebel forces inside the country, the army and the Air Force must develop and possess highly specialized counterinsurgency (COIN) forces. Adequate efforts in terms of equipment must be put on these forces because, unfortunately, Zaire is a very attractive target for insurgency warfare. Due to its status as a less developed country, it is a model for destabilization by imperialist powers. The duty of the armed forces is to come up with the ways and means to cope with the problem. Insurgent warfare of a communist-oriented type has many aspects that are pursued simultaneously: political, economic, psychological, sociological, and military,<sup>6</sup> but only the military aspect will be considered in this study. Appropriate military actions from the government must be taken to counter the military aspect of insurgent warfare.

#### COIN OPERATIONS

Military operations against subversive forces inside Zaire's territory must include as many aspects as insurgent warfare itself. They are essentially countermoves of every aspect of insurgent warfare. These operations include military, paramilitary, political, economic, psychological, and civic actions.

To counter guerrilla warfare using conventional warfare tactics has always proved very ineffective, for insurgents usually avoid direct contact with their opponents, preferring to strike by surprise and then disappear in the bush, ambush, harass.<sup>7</sup> In order to function in such a manner, they must be highly mobile in the bush, so the use of vehicles must be as limited as possible. They must be lightly armed with almost no logistic support and move by foot.

The use of the helicopter for troop transport denies the advantage of mobility to the insurgents and, combined with adequately armed helicopters used in mass, is the most effective way to counter the guerrilla. That was shown in Vietnam, and attack helicopters have been very effective in Afghanistan. Besides the use of helicopters as troop transports and as fire platforms, there are two other roles to be performed by helicopters--escort and search and rescue.

In suggesting that the helicopter is the most suitable platform for carrying out counterinsurgency operations in Zaire, this study foresees that insurgent forces will be of the type that operated in the country from its emergence into the international arena in 1960 until the last invasion of Moba from Tanzania a few years ago. That is, it assumes that rebel forces will not possess significant antiair firepower.

For a counterforce to the insurgents to be successful, it must at least match, if not surpass, them in mobility in

order to try to retake the initiative from them. However, in developing countries, and especially those lying in the tropics, roads are poor and practically impassable in the rain seasons. Thus, many times in the past in Zaire, troops transported by ground vehicles have been subject to ambush by rebels. This leaves air mobility as the only means to overcome most of the obstacles encountered in surface transportation.<sup>8</sup>

For the success of COIN operations in Zaire, passive navigational equipment should be fitted to helicopters because of the lack of ground features to lock on. Other special issues will be the target designation, an area in which the Air Force has not performed well so far, and the availability of adequate radio sets to transmit by voice clearly in two-way air-ground and ground-air communications.

Air mobility can be accomplished by fixed-wing aircraft such as C-130s (Hercules) or DHC-5 (Buffalo) which are the two main transportation aircraft in the inventory of Zaire's Air Force, as well as by helicopters such as SA-330 (Puma) and SA-332 (Super Puma). But, on balance, the latter have fewer disadvantages and more advantages than the former.

Rotary-wing aircraft are better suited for use at the tactical level, even though troops can be parachuted near the objective. There is a disadvantageous prerequisite to land troops near the objective, and that is the availability of a

suitable drop site on or near it. Other disadvantages in the use of fixed-wing aircraft at the tactical level are:

- Problems in the recovery of troops for use on a subsequent mission (evacuation by land through guerrilla-infested routes is hazardous).

- Impossibility of transport airplanes repositioning troops locally.

- Weather restrictions on air drops.

- Loss of personnel and equipment as a result of dropping in rough country (trees, rocky terrain).<sup>9</sup>

The helicopter, in contrast, has proven itself a very reliable machine in antiguerrilla warfare.

It can deposit as well as reposition troops, in all types of terrain, under all weather conditions. Troops can be readily recovered and returned to a basing point for immediate participation in a subsequent operation.<sup>10</sup>

The main disadvantages of helicopters are lack of speed and more maintenance than fixed-wing aircraft. Fixed-wing aircraft will be used for long-distance transportation of a large amount of troops and equipment to an airstrip from which helicopters will take over for tactical mobility and attacks. In the attack role, helicopters will operate in conjunction with their fixed-wing counterparts.

Zaire's Air Force should possess a very substantial number of transport and attack helicopters. Within the limits of affordability, relatively cheap helicopters but still with a good cost/effectiveness ratio should be considered.



### TRANSPORTATION HELICOPTERS

The helicopters should have the following specifications: medium-sized helicopters able to operate by day or night in tropical weather (rainy, humid, and hot in the rainy season and relatively dry and dusty in the dry season). Zaire's Air Force already has a certain experience with French helicopters, so the SA-332M Super Puma with its lengthened cabin is the most suited to do the job. It can take a total of 25 men lightly armed and has an unrefueled radius of more than 220 nautical miles with internal tanks only.<sup>11</sup> Intended for use as a tactical transport aircraft, the SA-332M can have a minimum of armament for self defense at the landing sites. This armament should include two 7.62mm machineguns or two pods of 36 68mm rockets each. But rockets are far more effective in suppressing hostile forces in prepared positions or under a jungle canopy than the machinegun.<sup>12</sup>

### ATTACK HELICOPTERS

Under this category are considered those light helicopters dedicated to these roles or missions:

a. Overhead cover: when a helicopter attacks the immediate zone surrounding the landing site before the arrival of transport helicopters and remains in the vicinity of the landing site to protect transport helicopters and ground troops who are about to engage the insurgents.<sup>13</sup> (This mission can also be accomplished by airstrike fixed-wing aircraft.)

b. Visual reconnaissance: armed helicopters carry out surveillance over areas suspected of containing guerrilla forces and probes of the areas with heavy machineguns and rockets. The objective of this specific mission is to make guerrilla forces reveal themselves by returning fire, and then to encircle the area and destroy the guerrilla forces.<sup>14</sup>

c. Direct fire support: during air assault operations, there is a time when assaulting forces are very vulnerable to the guerrilla forces. That is when troops are just leaving their transports and lack fire support because the airstrike aircraft or helicopters have cleared the area or, the opposite, when ground troops are just boarding the helicopters to withdraw from a desperate situation. That gap can be effectively reduced by the use of direct fire support from helicopters armed with a maximum capability of suppressive fire. Direct fire support is the equivalent of close air support (CAS) in conventional warfare.

d. Escort: in this mission, armed attack helicopters have the task of escorting a ground convoy and dissuading guerrilla troops from attempting to ambush them, or if an ambush occurs, of destroying them.

e. Search and rescue: because the population density is so low in certain areas of the country, downed aircrews who cannot rely on means to be rescued tend to lose confidence in themselves, and their morale suffers. Moreover, the survival of a wounded downed aircrew is doubtful. When combat

crews are assured of a reasonable chance of being rescued, their effectiveness as a combat force is enhanced.<sup>15</sup>

A mix of fixed-wing aircraft and helicopters should be used for search and rescue missions. These two types of aircraft would work in coordination. When a fixed-wing aircraft spots a downed aircrew or whoever is to be rescued, it would communicate the position in appropriate language or code to a nearby helicopter which would come to perform the actual rescue. Rescue by fixed-wing aircraft is a more complicated operation that requires special features in the aircraft and a skillful crew.

The point to make is that because those aircraft will be operating in a risky environment, a minimum of armament should be provided to them--at least enough for self defense at the most critical moment of operation. Protective strike passes by other helicopters or other strike aircraft should also be considered.

For the attack helicopter role, smaller helicopters can be used. The SA-319 Alouette III fitted with a sling can do the job perfectly if any landing is judged too risky.

As indicated earlier, attack helicopters dealing with guerrilla forces, lightly armed, must possess the fire power most suitable to cause the largest amount of casualties possible in a certain concentration of people under cover of bush, at any single pass. These weapons can be (a) .50 machineguns, as many as the platform can manage and (b) 36

68mm anti-personnel and incendiary rockets, at least 4 pods with a total of 144 rockets.

Because of the low-technology environment, there is no need to avoid radar detection by flying at tree-top level, thereby shortening the operational radius of action. But, in case low-level navigation is required, the lack of distinctive ground features makes air navigation very challenging.<sup>16</sup> Expensive automated navigation systems become a necessity for all aircraft that must reach a small landing spot in the operational area. The crew has to rely heavily on on-board navigation devices, which must perform well and be able to allow the helicopter to reach an isolated clearing hundreds of miles away from the point of departure with a low margin of error.

THE UNSOLVED CASE OF REBELS IN THE SURROUNDING  
AREAS OF THE TOWN OF KALEMIE (EAST SHABA)

In the long history of rebellions and their subsequent defeat by the armed forces, there is a special case to be mentioned. A small group of rebels is controlling a small area in the mountains just next to the town of Kalemie. These people are considered more outlaws than political dissidents. But they have for more than twenty years enjoyed the safety provided to them by the nature of the terrain, which is absolutely impossible to seize using conventional ground forces. Even airborne troops cannot be dropped into the area.

The problem can be solved by the use of ground artillery immediately followed by attack helicopters and then the landing of assault troops from transport helicopters for sweep operations. The area must be put under artillery fire for at least 24 to 48 hours before attack helicopters take over and finish the job. Suspect areas not hit by the artillery barrage must receive precise fire of anti-personnel and incendiary 68mm rockets.

When the target is judged soft enough, assault troops in transport helicopters will land in squads, lightly armed. Each squad will have flamethrowers to finish off those rebels reluctant to surrender and seeking to escape in the tunnels that they certainly had time to build.

Once again, in this specific case, the use of helicopters will be the answer to that painful problem of military leaders whose might has been challenged by a small group of people for the last twenty years.

## CHAPTER IV

### OPERATIONS OUTSIDE THE COUNTRY

In the struggle for world domination between great military powers, the weak new African nations are inviting targets. The leaders of these nations face a very difficult choice. Political or military alignment with one military power equals hostility from the other. That hostility, in terms of the military power's interests, may go as far as attempts to destabilize the country-target. Even the policy of nonalignment does not provide any kind of security for emerging nations. So, whatever a country's basic political ideology or its internal political situation might be, every new nation is a target for destabilization at all times.

The techniques used of arming a certain group of people and basing them at a neighboring country are well known. When the armed forces have pushed back guerrilla forces to their sanctuaries across the border, these sanctuaries must be destroyed to avoid further organized attacks from beyond the border.

Unfortunately, Zaire has always been victim of attacks from guerrillas based in neighboring countries. Therefore, in their attempts to modernize the military, Zairian leaders must take into account the fact that a small

invasion capability must be put in the armed forces. They must be able to perform their tasks and come back with an acceptable loss ratio.

Consequently, the Air Force must be equipped and trained to deal with its counterparts in these countries. In that case, a full awareness of their respective capabilities is obvious. To gain a sense of the requirements here, it is necessary to look at the capabilities of other countries. Those of relevant states are:

a. Angola.<sup>17</sup> The Angolan military is organized in ten military regions with five motorized infantry brigades; each brigade is composed of one tank battalion, two infantry battalions, and one artillery. There are:

- 19 infantry brigades (2 of guerrilla forces)
- 4 antiair artillery brigades
- 10 tank battalions
- 6 artillery battalions

Army equipment:

Tanks - 130 T-34, 260 T-54/-55, 90 T-62

- 50-60 PTG tracked armoured for reconnaissance
- 200 BRDM wheeled armoured for reconnaissance

Artillery - 460 pieces of various caliber from 76mm to 152mm

- 75 BM-21 and 122mm multiple rocket launchers and
- 40 mortars of various caliber

Antitank - 900 pieces: 75mm, 82mm, 107mm, AT-3 Sagger

Air Defense: More than 300 pieces ranging from old models to modern ZSU-23-4 (20 units) and ZSU-57-2Sp (40 units). Angola has a relatively small number of SA-7s.

Navy: The navy is mainly constituted of patrol craft (12 units) and fast patrol boats armed with missiles.

Air Force: The Air Force has 136 combat aircraft and some 27 armed helicopters.

Ground Attack: 4 squadrons with 23 MIG-23s, 62 MIG-21MFs, 12 SU-22s.

Interceptors: 3 squadrons; one with 8 MIG-19s, two with 30 MIG-21 BISS.

Transport: 12 Casa-212s, 10 Antonov AR-2s, 12 Antonov AN-12s, 29 AN-26s, 4 PC-6 turboporters, and 8 BN-2 Islanders. Many Antonovs are from the Soviet or Cuban Air Forces and their identifications have been replaced by Angolans.

Helicopters: 2 squadrons with 21 Mil Mi-25s, 13 Mi-17s, 50 Mi-8s, 24 SA-316B Alouette IIIs, 4 SA-365N Dauphins, 6 SA-341 Gazelles.

Air Defense: 5 SAM battalions of SAM-3 Goas and SAM-6 Gainfuls. For dogfights or close air interception, Angolan fighters have the AA-2 Atoll with passive infrared seeker.

SAM: 12 SA-2 Guidelines, 40 SA-3 Goas, 72 SA-6 Gainfuls, 48 SA-8 Geckos, SA-9 Gaskins. They also have 21 radar units.



b. Burundi.<sup>18</sup>

Army: 2 infantry battalions

1 parachutist battalion

1 commando battalion

1 armoured car company

Air Force: 3 SIAI-Marchetti SF-260Ws

2 SA-341 Gazelles and 3 SA-316C Alouette IIIs

c. Congo.<sup>19</sup>

Army: 8,000 troops

1 armoured battalion

2 infantry battalions

1 artillery group

1 engineer battalion

1 para-commando battalion

Equipment:

Tanks: 35 T-54/-55s, 15 Ch T-59s (from China),

14 T-62s (China), 3 PT-76s

Reconnaissance: 25 BRDM-1/-2s

APC: M-3, 104 BTRs (30-50, 30-60, 44-152)

Artillery: Howitzer: 75mm--6 M-116 pack;

76mm--8 M-1942; 100mm--10 M-1944;

122mm--8M-1938

Multiple Rocket Launcher: 8 BM-21s

Mortars: 82mm; 120mm--10 M-1943

Antitank guns: 5 57mm, recoilless: 57mm

Air Defense guns: 57mm: 28 M-1939

Air Force: 500 with 21 combat aircraft.

Ground attack: 1 MIG-15, 20 MIG-17s

Transport: 1 Fokker F-28, 5 Antonov AN-24s,  
5 Ilyushin il-14s, 3 C-47s, etc.

Helicopters: 1 SA-330 Puma, 4 SA-315B Alouette  
IIIs, and 316C Alouette IIIs.

Navy: 3 Shanghai IIs; 3 Zhuks

d. Tanzania.<sup>20</sup>

Army: 38,500 troops

3 division headquarters

8 infantry brigades

1 tank brigade

2 field artillery battalions

2 AA artillery battalions

2 mortar battalions

1 SAM battalion with SA-3s, SA-6s

2 Antitank battalions

2 signal battalions

Equipment:

Tanks: 30 Chinese type-59s; 30 Chinese type-  
62s, 36 Scorpions

Reconnaissance: 20 BRDM-2s; 50 BTR-40/-152s

Artillery: Guns: 76mm: 40 ZIS-3; 122mm: 200;  
130mm: 50

Multiple rocket launchers: 122mm:

50 BM-21s

Mortars: 350 82mm; 120mm

Antitank: Recoiless 75mm: 540 Chinese type-52s

Air Defense Guns: 14.5mm: 280 ZPU-21-4s; 23mm:  
40 ZU-23s; 37mm: 120 Chinese  
type-55s

SAM: 9 SA-3s, 12 SA-6s, SA-7s

Navy: Fast Attack Craft: 6 Chinese Shanghai IIs

Patrol Craft: 14 coastal:

- 1 GDR Schwalbe
- 2 GDR MB-13s 50-ton
- 3 Chinese Yulins
- 4 N. Korean Nampos
- 4 Modified LCAs (Assault landing craft)
- 4 Vosper Thornycrofts 75-ft

Air Force: 1000; 29 combat aircraft

Fighters: 3 squadrons with 11 Xian J-7s;  
18 Shenyangs (15 J-6s, 3 J-4s)

Transport: 1 squadron; 3 BAes (1 HS-125-700s;  
2 HS-748s)

6 DHC-5D Buffalos; 1 Antonov An-2

Helicopter: 2 Bell 47Gs, 16 Agusta-Bells  
(7 AB-205s, 9 AB-206s)

Tanzania's Air Force has ordered some An-26  
and An-32 transport aircraft.

e. Zambia.<sup>21</sup>

Army: 15,000 troops

1 armoured regiment

9 infantry battalions  
3 artillery batteries, 2 antiair artillery  
batteries, 1 engineer battalion, 2 signal  
squadrons

Equipment:

Tanks: 30: T-54/-55s and Chinese type 59s;  
30: PT-76

Armoured fighting vehicles: Reconnaissance  
60 BRDM-1/-2s; armoured personnel carrier  
13 BTR-60s

Artillery: guns: 76mm--30; 130mm--25  
howitzers: 105mm--18 pack; 122mm--  
25D-30s  
multiple rocket launchers: 122mm--  
50 BM-21s

Antitank: Recoiless 57mm--12 M-18s; 75mm--M-20s;  
84mm--Carl Gustav; Sagger AT-3s  
(guided)

Air Defense: guns: 20mm--50 M-55 triple  
37mm--40 M-1939  
57mm--55 S-60s  
85mm--16 KS-12s  
SAM: SA-7s

Air Force: 1200; 43 combat aircraft

Fighters: 2 squadrons, 1 with 12 Shenyang J-6s,  
1 with 13 MIG-21s

COIN/Training: 1 squadron with 18 Aecmacchi

MB-326 GBs

Transport: 2 squadrons; 1 with 9 Dornier DO-28s;

1 with 6 DHG-2 Beavers; 5 DMC-4 Caribous;

6 DHC-5D Buffalos

Helicopters: 1 squadron with 8 Agusta-Bells

(3 AB-205As, 3 AB-206s, 2 AB-212s)

20 Bell 47Gs; 11 Mil Mi-1s

SAM: 1 battalion; 3 batteries: SA-3 Goas

#### SUMMARY

The above figures taken from The Military Balance 1986-1987 published by the International Institute for Strategic Studies are approximate and the real situation might be in many cases slightly below these figures. Due to a shortage of spare parts, many aircraft are no longer in flying status.

The same figures from previous years show a rapid modernization of the Tanzanian armed forces. In fact, in recent years Angola and Tanzania in particular have expanded their forces, which were already a threat to Zaire.

Tensions arise from time to time between these two countries and Zaire. As noted earlier, Tanzania has been a sanctuary for dissidents in the struggle against the government of Zaire since 1964, and the last invasion of dissidents suffered by Zaire in 1984-85 came from Tanzania.

From the Air Force point of view, these two countries possess a small number of SAMs and the deadly ZSU-23-4 and

and ZSU 57-2 for use against low-flying aircraft. That constitutes a big threat, especially for a small Air Force like Zaire's. There is no doubt that the future Zaire Air Force must train and be equipped accordingly. Training must emphasize low-level navigation, modern dogfight techniques, and SAM evasions if electronic countermeasure (ECM) devices are not affordable.

## CHAPTER V

### PRESENT ISSUES

#### ONE OPERATIONAL PROBLEM OF THE PAST: CLOSE AIR SUPPORT

Most black African nations cannot afford long, resources-consuming wars. The war must be won or lost in a matter of weeks if there is no external intervention on the two sides. Assuming there is no external intervention in the war, the nation in possession of the Air Force well trained to interdict the flow of supplies to reach the battle support will win without any doubt.

In Zaire's armed forces, an issue of particular importance for the future is the problem of close air support. Often in the past ground forces did not receive timely close air support. CAS aircraft were shooting at the wrong place and even shooting at friendly forces.<sup>22</sup>

That is a problem that the Air Force and ground forces must try to resolve as quickly as possible for the benefit of the two services. The two main problems are target designation by ground troops and clear two-way communication between the aircraft and the ground. How can these two problems be eliminated?

When ground troops need help because they are under fire from a superior enemy, the presence of strike aircraft is sometimes useless or even dangerous. The intervention

of strike aircraft could be more effective if the pilot could be given precise information by radio or by visual signs on the ground, about the location of enemies to be destroyed.<sup>23</sup>

The first step is to get in contact with strike aircraft or a FAC aircraft circling the area at an altitude beyond the reach of small arms (5000 feet). To do so, a two-way clear voice radio communication between ground troops and these aircraft would be useful. The TRM 920 series VHF/UHF transceivers manufactured by Electronique Aerospatiale, Paris, are suited to do the job. For close-air support applications, the 2-watt manpack of TRM 920 or TRIY 921 should be provided to units expected to be in contact with enemy forces.

When the ground commander needs air support, he will radio the nearest airbase or directly call a nearby strike aircraft, and give precise instructions to the pilot to find the target. That is the toughest part because the pilot must be absolutely sure that he is not going to shoot friendly troops or waste ammunition by shooting too long or too short.

A system to unequivocally designate a target must be developed, and it should comprise smoking devices to mark the target by ground troops or a FAC aircraft, if there is one in the area. Because of its vulnerability, the FAC aircraft should have some armour to protect the crew, the engine, fuel tanks, and other critical parts of the plane. Tanks should be of self-sealing types.



For maximum utility, the FAC aircraft should carry as many smoking devices as possible and should have an extended flight endurance.<sup>24</sup> With some minor modifications, the Cessna 150 used as a trainer in the Zairian Air Force should be a good temporary FAC platform.

A COIN aircraft is already present in the inventory of the Zairian Air Force. The Aermacchi MB-326 GB and K models have proved more than once their effectiveness in COIN operations. They now carry mainly 68mm rockets in two launchers, but possibilities of four launchers must be explored to increase the destructive power of a single aircraft.

In sum, the attack helicopter such as SA-332 Gazelle, the transport helicopter SA-332L Super Puma, COIN aircraft MB-326 GB and K, the FAC Cessna 150, and two-way air-ground communication transceiver TRM-920 should now or in the future be the main components for COIN warfare. They should be used under the authority of a single command to better coordinate their operational use.

#### HOW CAN THE AIR FORCE GROW?

The development and maturing of the Air Force is not only a question of the will of military or political leaders but mainly a question of affordability. It is a basic economic issue. In relation to what you can do at present, how much are you going to spend to improve the ability to

defend the territorial integrity of the country from external and internal threats and established governmental institutions. That amount of money allocated for defense will determine the strength of the armed forces in general and the Air Force in particular.

Because all the needs of the Zairian Air Force cannot be met, the question is what priorities should be established in order still to have an Air Force that can be used effectively in case of conflict.

A general African obstacle to improvement of the armed forces is that leaders must build nations from disparate people still having deep tribal or regional feelings. As noted earlier, the tribal problem is being slowly but steadily solved in Zaire; however, it does still have an impact.

Theoretically, the first step to producing national armed forces would be to create a deeply rooted national feeling in the population. If this is present, it would be safe to build any size of armed forces with no fear that they might constitute a threat to national institutions.

On the other hand, nation-building objectives can be attained by an expansion of the forces, for national services is likely, whether incidentally or by design, to encourage the development of national rather than regional or tribal loyalties.<sup>25</sup> This is especially true in Africa where the military is the only institution that serves as a melting-pot

of all kinds of feelings, with the final result being the emergence of a new feeling: loyalty to your superiors through discipline.

The development of Zaire's Air Force is heavily dependent on the nationalism of its components, for the Air Force's coherence, its capabilities are determined by several interconnected factors. These are:

- Human resources (skills, leadership, morale)
- Firepower (quantity and quality of arms)
- Logistics (sustainability of forces)

The overall capability of the Air Force depends on how well each of these relates to the others. All these factors must be present simultaneously.

Human Resources. The emphasis must be put at developing leadership at every level of command. Because of specific problems in Zaire's Air Force caused by repercussions of economic difficulties, people are harder to lead today than a decade ago. The need for skilled people others can follow in any circumstance has grown dramatically.<sup>26</sup> Leadership is the key because a good leader is the one who knows the difference between "people" he leads and "equipment" he manages. While the latter does not react to any managerial input, the former have feelings that ultimately affect their morale, a very important factor in the performance of a given individual at a given time.

In Zaire's armed forces, an expression is "Moto Azali Se Moto"--literally "a human being is only a human being." This profound observation means that when you deal with people or lead your men, every time you stick to regulations or whatever without taking into account the human dimension, you cannot succeed in what you are doing. Future leaders in the Air Force must be aware of that.

Logistics (sustainability of forces).

Shortages of skilled personnel and managerial talents probably are felt most severely in the field of logistics. Combat simply cannot be sustained without a well-developed logistics system. Feeding, clothing, housing, paying, and nursing large numbers of people as well as supplying, fueling, repairing, calibrating, and replacing their equipment is a complex task, one that more than any other criterion distinguishes greater from lesser capabilities in Black Africa. The poor communications, infrastructure, and the difficult terrain and climatic conditions characteristic of most of the continent add to the difficulties African armies face in moving and supporting men and materiel.<sup>27</sup>

In the past, great warriors have lost because of their inability to match advance with a good logistical foundation. With the present economic situation, and any improvement in that situation years away, logistics in the Zairian Air Force can deal only with a short campaign of a few months. Beyond that period, extra resources must be available or air operations might come to a halt.

Manpower. In the future of Zaire's Air Force, expansion is a must because in the present organization the manpower comes mainly from the capital city of Kirshasa.

When air regions become reality and new strategically located air bases are built, the need for additional skilled manpower will inevitably be felt.

Firepower. Expansion of the size of the Air Force, however, means a need for more combat planes, which the government certainly cannot afford to buy at present. This dilemma is faced by most African leaders. In order to enlarge their armed forces, therefore, they usually enter into doubtful arrangements with an outside supplier who, in turn, demands reciprocation, usually in money, political allegiance, or military facilities. For most black Africans, strong military ties with a supplier mean loss of a part of their independence.

Thanks to a new code of investments and a climate of security in the country, the basis for a flow of new investments is now being laid. Therefore, prospects for the economy of Zaire look positive by the beginning of the 21st century. Consequently, the overall capabilities of the armed forces will without doubt reflect the economic wealth. What the Air Force will look like will be the product of the missions assigned to it in light of the general missions given to the armed forces by the Supreme Commander of the Armed Forces, and the funds invested in the armed forces.

To provide for national defense, Zaire needs a small but efficient Air Force. The key features of such an Air Force would include:

- Strategic air bases distributed in at least three air regions.
- Three squadrons of interceptors.
- Three squadrons of fighter bombers.
- Three squadrons of COIN aircraft (helicopters, jets, and turbo-propellar)
- A fleet of heavy transports
- A fleet of STOL transports
- Training and liaison aircraft.

What Kind of future must Zaire have in the next twenty years to afford such an Air Force? Does the country need a major war to expand its forces dramatically, as was the case with Nigeria and Ethiopia? .

So long as the present world economic order is maintained, there is little even the most skilled political leader can do. This order was designed during the colonial era for the benefit of colonial powers and western countries. African leaders not only were unable to bring their respective countries into a status of economic partnership, but worsened the situation in adopting models of development that were, in fact, poor imitations of West and East economies. The solution is to break with the past in adopting a radical change of attitude. Trade of raw materials is a dead end, the key is to manage to build an embryo of an industrial foundation to process on site the natural resources instead of buying at great costs goods industrial countries have manufactured

from African raw materials they acquired for a small price, the one they are willing to pay for.

In the meanwhile, solutions must be found to cope with the world economic disorder. The question is how can a country like Zaire afford to build armed forces that can effectively dissuade its enemies' proxies from attempting any belligerent act against it. It's true that the potentialities are great, but reliance solely on mining for the state's income means to put the country at the mercy of the unpredictable world market and to depend on external resources. Long-term agreement with a supplier is today's solution. With the help of friendly countries and only in that way can Zaire build a strong military without jeopardizing other priorities.

## CHAPTER VI

### CONCLUSION

The creation of a specialized branch in the Air Force dealing with counterinsurgency operations is something that will overcome most of the problems encountered by Zaire's armed forces in their almost three decades of existence. Except for a few conflicts such as the Shaba secession in 1961 and operations against mercenaries in Bukavu in 1964 and in Kisangani in 1967, all military operations in which the armed forces have been engaged have been of a guerrilla type, and government troops did not always perform as required because of a lack of suitable equipment and training. In 1964 and 1967, the effectiveness of some T-6 "Harvards" and T-28 used would have been employed in coordination with ground troops with adequate communications. Unfortunately, the pilots were operating from approximate indications from ground forces' liaison officers.

The massive use of armed helicopters is the key combination for success in fighting guerrillas. Preventing guerrilla warfare from erupting will have a stabilizing effect, for external aggression from a neighbor is less likely than guerrilla warfare.

To attack Zaire using hordes of proxies disguised as dissidents will not work any more, for the suitable response



to the situation will be ready. An attack from a proxy state being discarded, the result will be a durable period of tranquility and peace due to the price paid for armed forces that dissuade.

The presence of an efficient anti-guerrilla military apparatus will absolutely pay off in a country like Zaire, which by its nature has the greatest need for a minimal military capability. Our neighbors who have opted to play the role of proxies would find it very expensive to start any provocation if that initiative brought them immediate retaliation by Zaire's armed forces in general and the Air Force in particular. And that dissuasion can be achieved by trying to make the most from limited resources through adequate training and a good network of military and civilian intelligence.

Then there will be no more Kisanganis, no more Bukavus, no more Shaba Is or IIs, and no more Mobas, to the benefit of the Zairian nation.

# NOTES

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# APPENDIX

## MAP OF ZAIRE AND ITS NEIGHBORS

